"A Study of the Effects of Counselling, Nadishodhana Pranayama and Ashwagandha on the Level of Anxiety, Depression and Immune System of HIV Positive People"

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SIGNIFICANCE OF THE STUDY

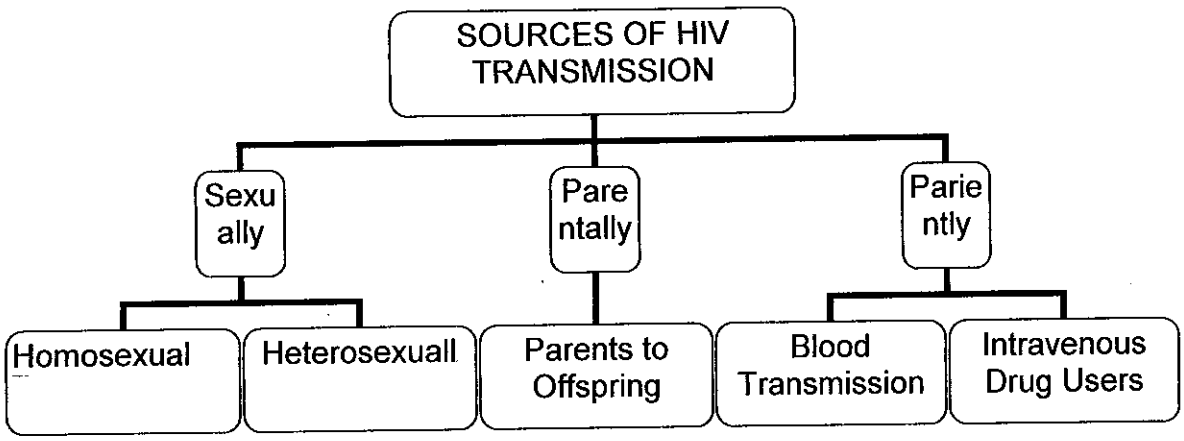
The global AIDS epidemic poses an unprecedented threat to society and India is no exception. In India, the number of people infected with the Human Immunodeficiency Virus (HIV) continues to increase rapidly. Most of those infected with the virus are ultimately expected to develop AIDS. AIDS is as much about social and political phenomenon as it is about biological and medical concerns. AIDS is no longer restricted to specific regions in the world or individuals with high-risk behavior rather it can infect and affect housewives, fetus children, youth, rich, poor or any body and any where.

The situation of HIV/AIDS is alarming in India. Nearly 39.60 lakh to 45.80 lakh people are infected with HIV in India, a number that is second highest in the world of the total AIDS cases, 35 % are aged 15 – 29 years. Every day approximately 1500 people become infected with HIV and of them young people below 25 years account for over 50 % infections. Ironically, 90 percent of the infected people themselves are not aware of their HIV status and may therefore be transmitting the virus to partners unknowingly. Former minister of Health and Family Welfare, Government of National Capital Territory of Delhi **Dr. Harsh Vardhan** said: "Every Passing minute, 10 – 15 new cases of HIV/AID are occurring in India and the daily tall rises up to 7000.

The HIV/AIDS epidemic is one of the most serious health problems in India. While HIV infection was first detected in **Chennai** in 1986, in recent times, South Asia is rapidly becoming the epicenter of the new epidemic. Its huge population includes the people most vulnerable to HIV/AIDS. Young people and more so young girls are comparatively more vulnerable to HIV than old people, primarily because of social norms and attitudes; ideologies and taboos; unemployment and poverty; behavior and inexperience; ignorance and myths but also biologically.

The trafficking of women and children in the region and their vulnerability to HIV / AIDS is an increasingly serious problem. It is disturbing that this epidemic is continuing to

evolve in an atmosphere of fear. Prejudice, stigma, silence and discrimination. In spite of head way being made in terms of increased awareness and advocacy, denial still exists in some sections of the society. The word `AIDS` is stands for Acquired Immunodeficiency Syndrome. As the name suggests, in AIDS failure or deficiency of immune system occurs which normally plays a protective role against infections. It is caused by Human Immunodeficiency Virus (HIV). These viruses have a tropism particularly for CD4 molecules present on subpopulation of T cell causing immunodeficiency various sources are responsible for the transmission of HIV virus –



People think it like an incurable disease people hate from the AIDS patients. For fear of infection people tend to withdraw from them. Those peoples who need sympathy & care of society have got the hateful vision from others. As the result feeling of helplessness, hopelessness anxiety, sadness, depression & for general psychological malaise are frequently seen in advanced life threatening illnesses. However, those feelings need to be acknowledged & addressed & not seen as inevitable consequence of dying that can not be managed. It is a matter of quality of life. Physically & psychological symptoms interact each other to future complicate diagnosis & management of distress. There are a no. of factors that influence & development of psychological morbidity. People die as they have lived. It is not a real goal to try & change that personality of the patient or change families from dysfunctional to functional during an advanced progressive illness at the end of life.

Since AIDS is one of the major epidemic disease of India and no. of AIDS patients increasing at rocketing speed. As the number of HIV positive patients are increasing day by day and such unhealthy adults ultimately result in unhealthy children and such unhealthy adults and children make unhealthy society which ultimately effects nation's economic and social growth of the country. Economic, physical, social and psychological growth of the HIV +ve individuals hazardously effected.

Even **Dr. Harsh vardhan** has clearly stated that "Every Passing minute, 10-15 new cases of HIV/AIDS are occurring in India and the daily tall rises up to 7000.

Since once developed AIDS cannot be cured but its onset in an HIV +ve individuals can delayed with number of alternative therapies. As the only treatment available for AIDS treatment is the use of ART drug (Anti retroviral therapy) which is given on the last stage when antibody production of the body goes down which is measured through the test named CD4 count when CD4 count range is above 200 then ART drug is not given and person said to be not suffering from AIDS.

In normal cases the median time of progression of disease from HIV infection to AIDS 9 to 10 years. But this median time can be increased to 15-20 years by alternative therapies like pranayamas, ayurvedic herbs like Ashwagandha, Tulsi, Satawari etc. and high protein, high calorie diet.

According to modern concept, "**No treatment of AIDS**" It is fully incurable disease but ancient science like **Ayurveda & Yoga** not accept this statement. Ayurveda can provide significant contribution to manage this health hazard by Rasayana therapy. Rasayana therapy revitalizes all tissues of the body and quality of Ojus, which is stated to be responsible for immunity of the body. The concept of Achara Rasayana that deals in detail with the life style and the measures to prevent disease can be a great help controlling AIDS. **Dr Nishteshwar**, who assisted the central council for Research in Ayurveda in many projects said "Rasayana herbs bearing tissue buildings & rejuvenating properties should be given a fair trial in the treatment if AIDS.

According to **Yoga Vidhya (may – June -2003)** of Bihar school of yoga, Ganga Darshan, Munger, AIDS is fully curable. A research is done by **Dr. M Bhega** in 1997 – 98 proves that the stage of Antarmouna – Dhyana make changes in the layers of consciousness of AIDS patient & responsible for full cure of this so called incurable disease .

It is ancient time saying:

"PREVENTION IS BETTER THEN CURE"

We are following this principle by using alternate therapy thus increasing time from HIV +ve individual to development of AIDS. So even if the patients is HIV +ve then also with alternative therapy which includes Nadishodhan pranayama ayurvedic herb Ashwagandha and counseling regarding reduction of anxiety and depression, high protein diet good hygiene practices and behavior modification can increase median time for development of disease from 9 - 10 years to 15 - 20 years. Realizing the importance of such alternative therapy we decided to do research on one of such alternative therapy using above mentioned combinations.

In this study we did the research regarding the effectiveness of selected combinations of alternative therapy is delaying the development of AIDS or delaying the progression of disease before AIDS develops. Alternative therapy not only improves quantity but also quality of life.

REVIEW OF LITERATURE

Doiphode V.V; Gupta, R.B(1998) studied on AIDS patients (25 patients) here administered with Guduchi , Shatavari , Amalaki , Bhui , Kohada , Makaradwaj , Vanga bhasma and abhark / bhasma in different combinations based on the principles of Rasayana Chikitsa described in Ayurveda . Evaluation of the result revealed that the group "A" patients showed significant weight gain, as compared to control group. No significant statistical difference were observed in experimental or control group in the

parameters observed viz, hemoglobin estimation , absolute lymphocyte count , platelet count , montoux test, and chest x-ray.

Meyer S A. (2000) investigated to early attention to nutrition needs have long term beneficiates for people living with HIV. HIV-positive people are faced with the task of maintaining optimal nutritional status despite an increasing insult to immune system integrity. From the first year of infection, people have elevated protein and energy requirements making it more likely they will experience weight loss if early nutrition intervention in not available to them. Although costly medications have extended longevity, frequent drug side effects not only affect nutrient intake but can cause troublesome metabolic abnormalities as well. Proactive nutrition intervention can result in fewer complications, leading to a cost of care and increased quality of life .To allow maximum benefit and cost – effectiveness, nutritional intervention and education should start at the time of initial HIV – Positive diagnosis and continue throughout the disease process. Following effective nutritional care guidelines

Kulkarni A. (1998) conducted a study on HIV patient. Ayurvedic medicines were given to the patients to get the symptomatic relief, they include Chyavanprash in the form of Raktavardhak (1tsp) in the morning, Sookshma triphia tabs (2 tabs) twice a day. The above medicines have been shown to improve the quality of life of the patient and help to keep away from the diseases and hazardous infections.

Miami Beach, FL (1997) investigated that malnutrition, a complication of AIDS, affect quality of life, immune function and survival. Many individuals with HIV and AIDS suffer from a significant loss of body cell mass. A majority of the clients in this study were not aware of their energy needs and therefore were more likely to experience weight loss. HIV positive men, unlike HIV +women may start out with weights that place them at increased risk of complications from weight loss. If practiced, early nutrition screening assessment. Education and counseling could positively impact the weight status of HIV +ve people.

Kumar Arun D.M Gandhi Rajani S and Kumar Sunil S Rajan(1995) describe that Siddha, Life Ayurveda, traditionally has a holistic approach Emphasis is now being made in exploring indigenous forms of medicine for the treatment of HIV / AIDS in various international conventions. experience in managing the HIV infection have been very encouraging particularly when patients came in for getting relief for various symptoms through an alternate approach. Remarkable improvements were noted in both symptoms and signs of minor and major opportunistic infections in all patients. These results lead into a systematic study with ethical consideration. The salient features of the treatment were discussed in the pape

Phytomedicine. (2005) evaluated the antibacterial activity of Ashwagandha [Withania Somnifera L. Dunal (Solanceac; root and leaves)] finally, the antibacterial efficacy of ashwagandha extracts isolated from plant (both root and leaves) was determined against experimental salmonellosis in Balb /c mice. Oral administration of the aqueous extracts successfully obliterated salmonella infection as revealed by increased survival rate as well as less bacterial load in various vital organs of the treated animals.

Altern Med Rev. Monograph (2004) indicated that, Withania Somnifera also known as Ashwagandha, Indian ginseng, or winter cherry, has been an important herb in the Ayurvedic and indigenous medical systems for over 3000 years. Historically the plant has been used as an aphrodisiac, liver tonic, anti-inflammatory agent, and more recently to treat asthma, ulcer insomnia and senile dementia. Clinical trials and animals research supports the use of Ashwagandha root for anxiety, cognitive and neurological disorders. Inflammation and Parkinson's disease. Ashwagandha is also used therapeutically as an adaptogen for patients with nervous exhaustion and debility due to stress and as an immune stimulant in patients with low white blood cell counts.

Kirkwood, GI; Rampes, H2; Tuffrey, V3; Richardson, J4; Pilkington, K5 (2005) a systematic review was carried out of the research evidence on the effectiveness of yoga for the treatment of anxiety and anxiety disorders. Eight studies were reviewed. They reported positive results, although there were many methodological inadequacies. Owing to the diversity of condition treated and poor quality of most of the studies, it is

not possible to say that yoga is effective in treating anxiety or anxiety disorders in general. However, there are encouraging results, particularly with obsessive compulsive disorders. Further well conducted research is necessary which May productive if focused on specific anxiety disorders.

Shirley Telles Nagendra H.R, Nagaratha R, (1993) studied on breathing through a particular nostril can alter metabolism and autonomic activities. The present study aimed at checking whether such changes actually do occur and whether breathing is consciously regulated. The results suggest that breathing selectively through either nostril could have a marked activating effect are a releasing effect in the sympathetic nervous system. The therapeutic implications of being able to alter metabolism by changing the breathing pattern mentioned.

Shirley Telles, Nagarathna R, and Nagendra H R conducted the study to assess the physiological effects of a yoga breathing practice that involves breathing exclusively through the right nostril. This practice is called surya anuloma viloma pranayama (SAV). Twelve volunteers were assessed before and after test sessions conducted on two consecutive days. On one day the test session involved practicing SAV pranayama for 45 minutes. During the test period of the other day, subjects were asked to breath normally for 45 minutes (N B Session). After the SAV session there was a significant increase in oxygen consumption and in systolic blood pressure and a significant decrease in digit pulses volume. The latter two changes are interpreted to be the result of increased cutaneous vasoconstriction .After both SAV and NB sessions, there was a significant decrease in skin resistance. These findings show that SAV has a sympathetic stimulating effect. This technique and other variations of unilateral forced nostril breathing deserve future study regarding therapeutic merits in a wide range of disorders.

Rachna Sirohi conducted the study to the effect of Nadishodhan Pranayama on Forced Vital Capacity which is an index of vital lung capacity. The study carried out at Brahmavarchas shodha Sansthan, Shantikunj Haridwar. The total sample consisted of 30 male participates in the age group of 20-40 years. They were divided into 2 groups,

20 subjects were assigned randomly to experimental group and 10 were assigned to control group. The results indicate that Nadishodhan Pranayama significantly improves the vital lung capacity of individuals.

STATEMENT OF PROBLEM

"A study of the effects of counseling, Nadishodhan pranayama & Ashwagandha on the levels of anxiety depression & immune system of HIV positive peoples."

OBJECTIVES

- To find the effects of counseling, Nadishodhan pranayama & Ashwagandha on the level of anxiety, depression & immune system of HIV positive peoples.

- To devise a therapeutic model on the basis of counseling, pranayama & Ashwagandha for the managing of anxiety, depression & immune system of HIV positive people.

VARIABLES

1. Independent variables:

Counseling

Nadishodhan pranayama

Ashwagandha

2. Dependent variables

Anxiety

Depression

Immune system

DESCRIPTIONS OF INDEPENDENT VARIABLES

Counseling

"Counseling represents a unique form of therapy with many positive features. Because it is an indirect form of service delivery. The professional time and resources of the constant can be used with particular efficiency".

Bulter makes a logical separation of the counseling process discerned as having two phases called 'adjective' and distributive: in the adjective phase , the emphasis is on the

Social personal and emotional problem of the individual; in the distributive phase the focus is upon his educational, vocational and occupational problems.

Nadishodhan Pranayama

The Sanskrit word Nadi means '**psychic passage** 'or '**specific pathway** 'through which prana flows throughout the body. The word shodhana means purification. Thus this is a practice whereby the pranic pathways are purified and decongested. This allows a prana to flow freely throughout the body, bringing the physical body into the best possible health and calming the mind. It is also called balancing pranayama.

And other way- Nadi is a tubular organ for the passage of prana, or energy carrying cosmic, vital, seminal and other energies, as well as sensation, intelligence and consciousness in the causal, subtle and physical bodies. Shodhana means purifying, or cleansing. The term nadi shodhana means the purification of the nerves. This pranayama is also referred to as 'alternate nose breathing.'

Swami Swatmarama recommends Nadi shodhana pranayama balancing the Ida and pingala. The mental force and vital force is one of thaw main objectives of pranayama left nostrils (Ida) and right nostril (pingala) if balanced can awaken sushumna (the psychic nadi or channel carrying kundalini) nadi. Nadishodhan pranayama for purifying Ida Nadi and pingala nadi.

Usually we can take breathing in particular time by right or left nostrils and symphatatic & parasymphatatic nervous system are activated. In this case both had a balance. It increase vitality and lowers the level of stress and anxiety. Depression as well as it clears the pranic blockages of the heart region. It helps reducing all the cardiac disorders while increasing the vital lunge capacity.

ASHWAGANDHA (WITHANIA SOMNIFERA)

A native of India, Pakistan and Srilanka, Ashwagandha is an important used in Ayurveda. The name comes from the peculiar odor of this herb, small akin to that of a sweaty horse.

Ashwagandha is an erect branched shrub with greenish or lurid yellow flowers. Ashwagandha in India is akin to ginseng in other parts of the orient. Both are touted for their longevity enhancing and sexually stimulating properties.

Parts Used : Root

Active compounds: Alkaloids and Withanolides

Compounds known as withanosides are believed to account for the multiple medicinal applications of ashwagandha.

These molecules are steroidal and bear a resemblance, both in their action and appearance to the active constituents of Asian ginseng (Panax ginseng) known as ginsenosides. (Some people do call ashwagandha as "Indian ginseng")

Generally ashwagandha stimulates the immune system. It has also been shown to inhibit inflammation and improve memory. Taken together, these actions support the traditional reputation of ashwagandha as a tonic or adaptogen. It counteracts the effects of stress and generally promotes wellness.

DESCRIPTIONS OF DEPENDENT VARIABLES

Anxiety

Children, adolescents and adults experience anxiety in different forms; this is visible in some and can be inferred in other form this physiological and Psychological responses. Anxiety also various in frequency and intensity in different persons, often in response to same stimulus. While anxiety may drive some towards positive action, in others it my

lead to non-action, almost paralyzing them by its overwhelming presence. A certain amount of anxiety is considered essential to get a person to perform at his/her highest levels of efficiency and productivity, but beyond a point it adversely affects both these. Thus anxiety may be a positive or negative condition in a person though it generally originates as a symptom of psychiatric disorder.

Everyone has worried and fear, even the rich and famous. **Freud** argued that anxiety can be adaptive if the discomfort that goes with it motivates peoples to learn new ways of approaching life `s challenges. But whether it is adaptive or maladaptive the discomfort can be intense. The anxious person who is waiting for the wrest to happen is after unable to enjoy a personal life or to give gratification from work. Anxious people may thus prevent themselves from experiencing positive outcome in life.

DEPRESSION

Everyone goes through tough times at different points in their lives and feel if they have had to cope with a stressful event or problem, such as the death of a loved one or a relationship break up. Depression is also the name for an illness that is more severe than normal sadness, lasts longer than two weeks, and interferes with other parts of your life, such as work, school or relationships.

Most often, depression produces a sad mood. However some people experience indiffence, apathy, loss of pleasure or irritability instead. In addition to disturbing one `s mood, depression can interfere with several basic body functions including changes in sleep, decreased or increased appetite, sluggishness, restlessness, fatigue, loss of concentration and poor memory. People with depression may feel excessive shame or guilt and dwell on thoughts of death or dying, including ideas about suicide.

IMMUNE SYSTYEM

Every organism is its lifetime is constantly being attacked by disease causing germs. In response to this organism have evolved a strategy to tackle these organisms and overcome disease collectively called as immune system. The word "Immune" implies

freedom from a burden: an organism which develops immunity to a specific infecting agent will remain free of infection by that agent like long. The Immune system helps in recovering from the infection, and after recovery, the individual usually remains free of that disease forever.

NULL HYPOTHESIS

Following hypothesis will be tested in this study

1- There are no significant effects of 'counseling''Nadishodhan Pranayama' and 'Ashwagandha' on the level of 'anxiety' of HIV / AIDS people.

2- There are no significant effects of 'counseling' 'Nadishodhan pranayama' and 'Ashwagandha' on the level of 'depression' of HIV/AIDS people.

3- There are no significant effects of 'counseling' 'Nadishodhana pranayama' and 'Ashwagandha' on the level of 'immune system' of HIV / AIDS people.

4- There are no significant effects of 'counseling' 'Nadishodhan pranayama' and 'Ashwagandha' on the level of 'anxiety', 'depression' and 'immune system' of HIV/AIDS people.

METHODOLOGY

SAMPLE- The sample of 20 HIV positive people will be taken from Delhi. The subjects will be selected from early stage by using accidental sampling technique.

RESEARCH DESIGN- Single group, pre- post design will be taken in this study. time duration of therapy is six month.

TOOL USED

There are three tools that will be used to measure the variables involved in this study:

1. **Sinha Anxiety comprehensive Test**

   - By A.K.P Sinha and L.N.K Sinha

2. **Depression Scale**

   -Depression test should be developed

3. **Immune Test**

   - CD4 test

STATICSTICAL ANALYSIS

The data will be analyzed for pre and post assessment, t- test will be used to test the null hypothesis.

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